DOCUMENT RESUME

ED 195 727 CE 027 280

AUTHOR Sanders, Carol S.
TITLE Vocational Educators' Views of Activities Associated with Dissemination.
PUB DATE 8 Dec 80
NOTE 22p.: Paper presented at the American Vocational Association Annual Convention (New Orleans, LA, December 8, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrator Attitudes: Administrators: *Counselor Attitudes: Elementary Secondary Education: *Information Dissemination: Program Effectiveness: *Program Improvement: Questionnaires: School Counselors: School Districts: Statewide Planning: Supervisors: Surveys: *Teacher Attitudes: Vocational Directors: *Vocational Education: Vocational Education Teachers
IDENTIFIERS Illinois

ABSTRACT

A study was conducted to investigate views of vocational educators who receive program improvement products regarding activities currently associated with dissemination. The construct of the Dissemination Analysis Group (DAG) four-level definition of dissemination--spread, exchange, choice, and implementation--provided the theoretical framework for the questionnaire used to gather data. Three questions were asked regarding the twenty-four dissemination activities (six for each of the four levels): (1) extent of experiencing, (2) level of perceived experience, and (3) judged effectiveness of the dissemination activities. Findings showed producers experienced all activities to a greater extent than linkers, and linkers experienced all activities to a greater extent than users. This indicated a gap between experiences of role group involved in the dissemination process. The highest ranked dissemination activities were theoretically defined either as spread or exchange activities, while choice and implementation activities appeared toward the lower end of the rankings. It was also found that respondents could discriminate among activities they perceived as providing assistance on spread and implementation levels of dissemination, but not among those they perceived as providing assistance on exchange and choice levels. (Appendixes include the DAG definition of dissemination, dissemination activity descriptions, and data tables and charts.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED195727

VOCATIONAL EDUCATORS' VIEWS
of
ACTIVITIES ASSOCIATED WITH DISSEMINATION

A Presentation to the
American Vocational Education Research Association

by
Carol S. Sanders

American Vocational Association Annual Convention
New Orleans, Louisiana
December 8, 1980

CE027280

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Carol S. Sanders

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

VOCATIONAL EDUCATORS' VIEWS
of
ACTIVITIES ASSOCIATED WITH DISSEMINATION

PURPOSE

Dissemination has recently become a thrust on the national and state scene, with 208 federal laws mandating its improvement. Studies have been conducted which document the lack of impact as a result of millions of dollars funded for vocational education research and development activities. Many Research and Development (R & D) program improvement products are developed but many never find their way into classrooms. Dissemination efforts are fragmented. Although a wide variety of techniques for dissemination has been developed, widespread dissemination is rare (COVERD, 1976).

Public Law 94-482 calls for the reform of the system currently used for delivering vocational education outputs. The law stipulates that each state must use 20 percent of its federal vocational education funds for program improvement and supportive services. Part of those 20 percent funds, according to the law, may be used for dissemination of the results of contracts used to develop program improvement products. Thus, improvement of dissemination efforts has become a major priority in many states, Illinois in particular.

National emphasis has focused upon bringing about a compliment between Federal dissemination activities and the development that states and local districts undertake to improve their dissemination efforts. The charge has been made for states to move toward the development of coordinated systematic dissemination systems, compatible with systems in other states, but designed and managed in a fashion unique to their particular conditions and existing structures. To that end a working definition of dissemination has been recommended. The Dissemination Analysis Group (DAG) of the Department of Health, Education and Welfare introduced a definition in 1977 that has since been adopted by a number of national and state groups concerned with improving the dissemination process. The DAG determined that activities engaged in by those involved in dissemination can be classified into four categories according to the intent or purpose of

each activity (Fletcher, 1977). The DAG four-level definition of (1) spread, (2) exchange, (3) choice, and (4) implementation is applicable to the use of the term "dissemination" in the laws (see the Appendix, Table 1 for a complete definition).

Dissemination of vocational education program improvement products has become a concern of all groups involved in the process: producers of program improvement products, users of the products, and linkers (intermediate agents between producers and users). All groups play a vital role in the dissemination process.

Before developing coordinated, systematic dissemination systems it is necessary to determine how the various role groups (producers, users, and linkers) involved in the dissemination process view the activities currently associated with dissemination. Developers of dissemination systems need to determine "what is" before attempting to design new systems or revamp existing systems.

Since dissemination systems are to be compatible with systems in other states, but designed and managed in a fashion unique to the particular conditions and existing structure, it is important for the developers of the dissemination system for the State of Illinois to determine vocational educators views of dissemination in their state as well as those of vocational educators nationwide.

Therefore, this study was conducted to investigate the views of vocational educators who receive program improvement products regarding activities currently associated with dissemination. The construct of the DAG four-level definition of dissemination: (1) spread, (2) exchange, (3) choice, and (4) implementation provided the theoretical framework for the questionnaire used to gather data for the study.

DESIGN AND ANALYSIS

The study involved gathering data via a survey in the form of a mailed questionnaire. The questionnaire contained 29 items, one pertaining to self-identification of role, 24 items pertaining to dissemination activities, two items to collecting demographic information, one to gathering information as to the method used in the respondent's state for implementation of program improvement products, and another pertaining to listing additional effective dissemination techniques and strategies. Of the 24 items pertaining to

dissemination activities, six items pertained to each of the four levels of dissemination as defined by the DAG (see the Appendix, Table 2 for a list of activities).

Three hundred and seventy-five instruments were sent nationwide. Six weeks after the initial mailing, 229 instruments were returned (61 percent). Of these, 211 were usable and 18 unusable.

The independent variables for the study included: (1) role groups: producers, users, and linkers, and (2) residence groups: non-Illinois and Illinois. The dependent variables were the outcomes of three questions pertaining to the 24 dissemination activities: (1) extent of experiencing, (2) level of perceived experience, and (3) judged effectiveness of the dissemination activities.

Percentages, means and mean percents, and correlational measures were used to analyze the data. Chi-square analysis, Cramer's V, squared Pearson product-moment correlation, and squared multiple correlations were used to examine the degree of association between various independent and dependent variables.

FINDINGS

Of the 211 usable instruments 133 were identified as non-Illinois respondents and 78 as Illinois respondents. Twelve respondents neglected to identify their predominate role. Of the 199 who identified their role, 33 considered themselves to be producers, 104 as users, 57 as linkers, and 5 as having combined roles. The largest percentage of the non-Illinois residence group identified themselves as users, followed by linkers and producers. The largest percentage of the Illinois residence group identified themselves as users, then as linkers; no one identified themselves as a producer. When determining the capacity of the role groups, 67 percent of those identifying themselves as producers reported themselves as spending the major portion of their time as state office administrators/supervisors; the largest two groups of users identified themselves as vocational teachers and school administrators/supervisors; linkers identified themselves first as counselors, closely followed by school administrators/supervisors and state office administrators/ supervisors.

The largest percentage of respondents were employed in Elementary/Junior High/Secondary schools, followed by State Departments of Education, Community Colleges and Colleges and Universities. Producers were primarily employed in State Departments of Education, users in Elementary/Junior High/Secondary schools, and linkers in Elementary/Junior High/Secondary schools.

When considering the method in which program improvement products are implemented on the local level, 71.66 percent of the respondents reported that it was left up to the discretion of the respondent's local education agency. About 11 percent reported implementation occurring as a result of state office mandate.

Experiences of the Respondent by Role Relative to Dissemination Activities

Based on examination of mean level (extent) of experience and correlations, it was found that the mean level at which various dissemination activities were experienced was associated with the role of the respondent (see the Appendix, Table 3 and Figure 1). It was seen that the combined role group generally experienced the dissemination activities at a higher mean level than the other role groups; producers experienced all of the dissemination activities at a higher mean level than linkers; and linkers experienced the activities at a higher mean level than users. Correlations between the mean level of experiencing for individuals in the various role groups were positive and moderate to large in magnitude; all correlations were significantly greater than zero. Fifty-three percent of the variance in the mean levels at which activities were experienced was accounted for by the role of the respondent.

Experiences of the Respondents by Residence Relative to Dissemination Activities

From an examination of mean levels (extent) of experience and correlations, it was found that the mean level at which various dissemination activities were experienced was associated with the residence of the respondent (see the Appendix, Table 4 and Figure 2). It was observed that non-Illinois residents experienced all of the dissemination activities at a higher mean level than Illinois residents. However, the Illinois group

was void of producers, the role group shown to experience the 24 activities at a higher mean level than users and linkers. In general, the rank order of the 24 activities based on the extent to which the activities were experienced was similar for the two residence groups. Correlation between the mean level of experiencing for the residence groups was positive and large in magnitude (r=.89) with the correlation significantly greater than zero. Seventy-nine percent of the variance in the mean level at which activities were experienced was accounted for by the residence of the respondent.

Perceptions of the Respondents by Role Relative to Experience Provided by the Dissemination Activities

Based on consideration of percents, mean percents, correlations, chi-square, and Cramer's V, it was found that there was no statistically significant association between the level at which activities were experienced and the role of the respondents.

The mean percentages of producers, users, and linkers who perceived the 24 activities at the spread and implementation levels of dissemination were fairly similar. Patterns existed between the three role groups and their perception of the 24 activities on the spread and implementation levels. Less consistent patterns emerged for the role groups and their perception of the 24 activities on the exchange and choice levels of dissemination. Correlations between the percentage of respondents who perceived the activities on the spread and implementation levels and role groups were strong; all were significantly greater than zero. Extremely weak correlations occurred between the percentages of respondents in the three role groups who viewed activities on the exchange level. Generally, the same was found to exist between the percentage of individuals in the role groups and their perceptions of the activities on the choice level. The highest correlation between the percentage of respondents in the three role groups appeared on the implementation level of dissemination (r=.78).

Fourteen of the 24 activities were perceived by the three role groups to provide assistance on the theoretically defined levels by a higher than chance percentage. Two of these activities were theoretically

defined as spread, four as exchange, three as choice and five as implementation.

A chi-square statistic showed a significant relationship to exist between the level at which activities were experienced and the respondent's role; however, Cramer's V indicated that the association between the level at which activities were experienced and the individual's role was not strong. The significance of the chi-square derived from six of the 16 cells; thus, the association was not consistent across the rows and columns of the contingency table.

Perceptions of the Respondents by Residence Relative to Experience Provided by Dissemination Activities

As revealed from percents, mean percents, correlations, chi-square and Cramer's V, no statistically significant association between the level at which activities were experienced and the residence of the respondents was noted.

Variability was seen in the percentages of the individuals in the residence groups who perceived assistance provided by the activities on each of the four levels of dissemination. Based on the mean percentages, both residence groups perceived a greater amount of assistance to be beyond the spread level. The patterns displayed by the percentages of respondents experiencing the activities on the spread and implementation levels were similar for both residence groups. Correlations confirmed the patterns to exist between the percentages of residents experiencing the activities as spread and implementation. No consistent patterns were shown between the percentages of residents who experienced the activities on the exchange and choice levels of dissemination. The strong positive correlations shown to exist between the percentages of individuals in the residence groups and their perceptions of the activities on the spread and implementation levels do not imply that a large number of respondents perceived the activities on these levels; the correlations indicate that there was consistency in the perceptions of the respondents. Generally, the activities experienced on the spread level were viewed as such by a lower percentage of respondents than on the other three levels. Activities experienced on the exchange level were perceived as such by a higher percentage of respondents than on the spread level. Eighteen activities

were perceived by 25 - 45 percent of both residence groups to be on the choice level (4 theoretical, 14 non-theoretical). Illinois residents seemed to consistently perceive activities on the implementation level by a higher percentage of respondents than non-Illinois residents.

Thirteen of the 24 activities were perceived by individuals in the two residence groups to provide assistance on the theoretically defined level at a higher than chance probability.

Even though a chi-square analysis showed a significant relationship between the level at which activities were experienced and the respondent's residence, Cramer's V indicated that the association between the level at which activities were experienced and the individual's residence was weak. The significance of the chi-square derived from three of the eight cells; thus, the association was not consistent across the rows and columns of the contingency table.

Association Relative to a Match Between Theoretical and Experienced Levels of Dissemination

Analysis of the data through chi-square and Cramer's V revealed that there was no statistically significant association between the theoretical levels of dissemination (as defined by the DAG) and the levels at which the activities were actually experienced. A significant chi-square was obtained but the association between the experienced levels and the theoretical levels was not particularly strong as shown by the small Cramer's V (.169). The strength of the association was low as only four of the 16 cells contributed meaningfully to the significant chi-square. The association was not consistent across the rows and columns of the contingency table. The same held true when interpreting the chi-square analysis for the four matched cells (theoretical-experienced); there was no consistent association between the cells.

Chi-square analysis was conducted to determine if a significant association existed between the level at which the role groups (producers, users, linkers) experienced the activities and the theoretically defined levels. Only one or two cells contributed meaningfully to the significance of the chi-square; thus, no significant relationship existed between role and the match between theoretical definition and actual experience.

Activity Effectiveness Relative to Concordance Between Experienced and Theoretical Levels of Dissemination

Based on squared multiple correlation coefficients it was found that the effectiveness of an activity was rated without regard to construct or role of the respondent. Effectiveness rating was due more to the level at which the respondents perceived the activity than if matched with the theoretical level. Neither the (1) concordance between the theoretical and actual level experienced by the respondents, or (2) role, contributed in any meaningful way to the rating of effectiveness.

Conclusions

Those individuals charged with the responsibility of developing, revamping, or maintaining dissemination systems, particularly those adopting the DAG definition of dissemination, should be aware of the findings of this study.

Because effective dissemination of vocational education research and development products requires the collaboration of all involved in the process: producers, users, and linkers; those charged with dissemination responsibilities need to be aware that producers experienced all of the activities to a greater extent than linkers and users, and linkers experienced all the activities to a greater extent than users. This finding indicates that a gap exists between the experiences of the role groups involved in the dissemination process. It appears that the dissemination process is not functioning as well as it might be. Evidently what producers think they are doing is not the same as how linkers interpret what they are doing, and what linkers think they are doing is not the same as what users are experiencing. These findings support Myers comment: "... often in discussions about diffusion projects and instructional change efforts, as well as in the undertakings themselves, we confuse what we are trying to do or what we say we are doing, with what we are doing. We assume our desires and our perceptions are the same as our real impact" (1977, p. 3).

Communication between producers, linkers, and users is essential when considering the finding that 71.66 percent of the respondents reported that implementation of program improvement products is left up to the descretion of the local education agency.

After this study was well underway, it came to the attention of the researcher that perhaps the producer role group should have been separated into two groups to single out a fourth group involved in the dissemination process, the funder. The funder is responsible for providing the necessary resources for the research and development of program improvement products. Often the resources end with the development of the product with few, if any, funds allocated for dissemination efforts. Perhaps another study should be conducted in which the four groups are involved: funder, producer, user, and linker.

Those charged with dissemination responsibilities need to be aware of the extent to which each of the dissemination activities were experienced by each of the role and residence groups, the subsequent rank order of the activities and corresponding DAG theoretically defined levels.

The rank order of dissemination activities based on the extent to which the activities were experienced was similar for both the non-Illinois and Illinois residence groups. The high correlation found between the percentages of individuals in the residence groups and the extent to which the activities were experienced indicates that even though the Illinois group was void of producers, the extent to which they experienced the activities was similar to non-Illinois residents.

In general, the highest ranked activities based on the extent to which the activities were experienced by both the role and residence groups were theoretically defined either as spread or exchange activities while choice and implementation activities appeared toward the lower end of the rankings. The top four ranked activities were identical for both the residence groups. Two of these activities were theoretically defined as spread and two as exchange. These findings support an observation made by Magisos (1979) that often disseminators fail to achieve impact with their work because they rely too heavily on only one level of dissemination or fail to carry it through to implementation. However, disseminators are not the only ones at fault; they can only do as much or go as far as resources will allow. Often resources end with the development of a product with few, if any, resources allocated for dissemination efforts.

It was found that the respondents were able to discriminate among the activities they perceived as providing assistance on the spread and implementation levels of dissemination. However, the respondents were unable to discriminate among the activities they perceived as providing assistance on the exchange and choice levels. Either the intended outcomes of the activities on these two levels need to be more clearly defined or the two levels combined into one; the intended outcomes of these two levels may be too similar for distinctions to be made between them. Even though the respondents could discriminate among the activities they perceived as providing assistance on the spread level a low percentage of respondents perceived the activities to be on this level. Perhaps this is because spread level activities also contain outcomes considered theoretically to be exchange and choice outcomes. This is indicated by the larger percentage of respondents perceiving the activities as providing assistance on the exchange and choice levels of dissemination. One of the assumptions stated for this study was that dissemination activities were perceived in similar ways by different people. As the activities on the exchange and choice levels are conducted, for the most part, by two-way forms of communication, it is difficult to control intended outcomes. Perhaps the DAG definition is merely a guide to assure that the dissemination process does not stop with the spread level and is carried out through implementation.

Individuals in both the role and residence groups perceived a number of activities as providing the assistance intended theoretically by the DAG. Both groups also perceived a number of activities as providing assistance on levels other than intended by theory. Theorists need to take a closer look at the activities that were perceived by a higher than chance percentage on levels other than those intended theoretically to determine if those activities need to be recategorized.

Upon first glance at the findings of this study, one could say that the construct implied in the Dissemination Analysis Group (DAG) four-level definition is quite weak; dissemination activities are not assisting people in the way in which they are intended. Upon further examination of the findings, one can see that 14 of the 24 activities were viewed by a higher than chance percentage by the three role groups to assist in the way they were intended (see the Appendix, Table 5).

The DAG recommended the four-level definition in 1977 in relation to elementary and secondary education. Their recommendation to establish a consistent definition of dissemination in law and in practice was made to bring about cooperation among the various people involved in dissemination (Fletcher, 1977). Since that time a number of national organizations have adopted the four-level definition. Because change is slow in education it will take time for state and local education agencies to adopt the definition, and in turn specialized groups of educators. Time is needed for all responsible for dissemination to put the four-level definition into action. Taking all these facts into consideration one would have to say it is too early to test the construct implied in the DAG definition based on the views of a specialized group of educators.

Those responsible for dissemination efforts need to consider the findings of this study as they plan for future activities in which they guide the activities of all involved in the dissemination process: producers, users, and linkers. The DAG definition assures that the dissemination process starts with "spread" and continues through "implementation"; the definition serves as a guide for all involved. Leaders in dissemination efforts need to take measures to: (1) further define the roles of the groups involved in the process, (2) bridge the communication gap shown between the groups, and (3) insure that those involved similarly perceive the outcomes of activities associated with dissemination.

LIST OF REFERENCES

Committee on Vocational Education Research and Development. Assessing vocational education research and development. Washington, D.C.: National Academy of Science, 1976

Fletcher, J.L. Final report of the dissemination analysis group to the dissemination policy council. Washington, D.C.: National Institute for Community Development, 1977

Magisos, J.H. Program improvement is the purpose of dissemination. Presentation to the National Vocational Education D & U Conference. Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979

Myers, C.B. "Diffusion" does not equal "instructional change". Paper presented at annual meeting of the National Council for the Social Studies, Cincinnati, Ohio, Nov., 1977 (ERIC Document Reproduction Service No. ED 156546)

Office of Education, Department of Health, Education and Welfare. Public law 94-482 - rules and regulations, Oct. 12, 1976

APPENDIX

Table 1

DISSEMINATION

Definition of Dissemination Analysis Group

Level 1: Spread: The one-way casting out of knowledge in all its forms: information, products, ideas and materials, "as though sowing seeds."

Examples:
Radio and television broadcasts, general mailings (without follow-up or feedback), news releases, speeches, official publications (e.g., the Federal Register; Commerce Business Daily), journal and magazine articles, books, newsletters; inclusions in ERIC, libraries.

Level 2: Exchange: The two-way or multi-way flow of information, products, ideas and materials as to needs, problems, and potential solutions.

Examples:
Need-arousing, need-sensing, and activities which provide for user influence ("feedforward"); feedback activities, as user surveys, user panels, and site visits; and sharing activities, such as conferences among peers.

Level 3: Choice: The facilitation of rational consideration and selection among those ideas, materials, outcomes of research and development, effective educational practices and other knowledge that can be used for the improvement of education.

Examples:
Incentives of LEAs to engage in search behavior before making decisions; training in decision-making; visits by decision-making practitioners to a variety of demonstration sites; searches of resource bases, and comparisons of the array of relevant programs, products, or knowledge so generated; catalogs comparing alternatives; traveling exhibits.

Level 4: Implementation: The facilitation of adoption, installation and the ongoing utilization of improvements.

Examples:
Consultation, on-user-site technical assistance, locally tailored training programs in required new behaviors; laboratory settings for the practice of new behaviors.

(Fletcher, 1977, pp.3-4)

Table 2

Dissemination Activity Descriptions
by Number and Level

Level*	Number	Activity Descriptions
S	1.	Program improvement products advertised in newsletters and brochures sent to general audiences
E	2.	Program improvement products available on a cost recovery basis
S	3.	Information concerning program improvement products through ERIC (Educational Resources Information Center)
C	4.	On-site demonstration of program improvement products
I	5.	Communication networks composed of program improvement product users
E	6.	Demonstrations of program improvement products at conferences/workshops
E	7.	Panel discussions of product users at conferences/workshops
C	8.	Field testing of products
I	9.	Incentives for staff participating in program improvement activities
C	10.	Catalogs or brochures which compare alternatives of several products
S	11.	Specific materials advertised through brochures/newsletters sent to targeted audiences
S	12.	Loan of materials through state or regional libraries
E	13.	Matching of program improvement products to local needs
C	14.	Centers to demonstrate new products and programs
C	15.	Implementation of specific products based upon local needs and conditions
I	16.	Continued technical assistance
I	17.	Program improvement training programs tailored to match local needs and conditions
S	18.	Program improvement products advertised in professional journals
E	19.	Communication between producers and users
I	20.	On-site technical assistance
E	21.	Examination copies of program improvement products
C	22.	Choice of several products that would meet the same need
S	23	Program improvement products available through public libraries
I	24	Implementation techniques based upon local situations

* S=Spread, E=Exchange, C=Choice, I=Implementation

Table 3

Mean Level and Rank Order of Activities
by Role

Activity Number	Defined Level*	Role							
		1 Producer N=33		2 User N=104		3 Linker N=57		4 Combined N=5	
		Mean**	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	S	2.64	6	2.43	2	2.50	2	2.80	7.5
2	E	2.24	20	1.70	19.5	1.87	22	2.60	14.5
3	S	2.73	1	2.00	10	2.42	4	2.80	7.5
4	C	2.38	17	2.07	6	2.18	10.5	2.80	7.5
5	I	2.36	18.5	1.62	24	1.86	23	2.40	18.5
6	E	2.70	2.5	2.51	1	2.58	1	2.80	7.5
7	E	2.60	8	2.06	7	2.26	7.5	2.60	14.5
8	C	2.66	4.5	1.87	12	2.15	12	3.00	1.5
9	I	2.18	22	1.69	21	2.13	13.5	2.80	7.5
10	C	2.09	23	1.92	11	1.98	19	2.20	21.5
11	S	2.66	4.5	2.30	3	2.44	3	3.00	1.5
12	S	2.61	7	2.17	5	2.37	6	2.80	7.5
13	E	2.44	14.5	1.84	14	2.18	10.5	2.80	7.5
14	C	2.19	21	1.66	22.5	1.93	20.5	2.40	18.5
15	C	2.47	13	1.79	16	2.05	17	2.80	7.5
16	I	2.53	10	1.71	18	2.13	13.5	2.40	18.5
17	I	2.42	16	1.70	19.5	2.02	18	2.20	21.5
18	S	2.56	9	2.01	9	2.21	9	2.60	14.5
19	E	2.49	12	1.85	13	2.11	15.5	2.60	14.5
20	I	2.44	14.5	1.80	15	1.93	20.5	2.80	7.5
21	E	2.70	2.5	2.25	4	2.39	5	2.80	7.5
22	C	2.36	18.5	2.05	8	2.26	7.5	2.00	23
23	S	2.03	24	1.66	22.5	1.71	24	1.80	24
24	I	2.50	11	1.75	17	2.11	15.5	2.40	18.5

* S=Spread, E=Exchange, C=Choice, I=Implementation
** Means are rounded to the nearest one hundredth

Table 4

Mean Level and Rank Order of Activities
by Residence

Activity Number*	Defined Level**	Residence			
		Illinois N=78		Non-Illinois N=133	
		Mean***	Rank Order	Mean	Rank Order
1	S	2.37	2	2.53	2
2	E	1.68	19	1.93	22
3	S	1.97	7.5	2.41	5
4	C	1.91	10	2.29	7.5
5	I	1.64	20.5	1.94	21
6	E	2.50	1	2.57	1
7	E	2.08	6	2.29	7.5
8	C	1.84	11.5	2.23	11
9	I	1.64	20.5	2.08	20
10	C	1.74	14	2.14	16
11	S	2.30	3	2.47	3
12	S	2.15	5	2.38	6
13	E	1.78	13	2.19	13
14	C	1.73	15	1.89	23
15	C	1.69	18	2.17	14
16	I	1.72	16	2.11	18
17	I	1.62	22	2.12	17
18	S	1.97	7.5	2.28	9
19	E	1.84	11.5	2.16	15
20	I	1.70	17	2.09	19
21	E	2.20	4	2.46	4
22	C	1.96	9	2.24	10
23	S	1.57	24	1.83	24
24	I	1.60	23	2.20	12

* See Table 18 for activity descriptions
** S=Spread, E=Exchange, C=Choice, I=Implementation
*** Means are rounded to the nearest one hundredth

Table 5

Summary of Activities Experienced by More Than 25 Percent of Respondents by Role and Residence Groups

Role	Residence	Activity Number	Activity Descriptions
			SPREAD LEVEL
X	X	1	Program improvement products advertised in newsletters and brochures sent to general audiences.
		3	Information concerning program improvement products through ERIC (Educational Resources Information Center).
X	X	11	Specific materials advertised through brochures/newsletters sent to targeted audiences.
		12	Loan of materials through state or regional libraries.
		18	Program improvement products advertised in professional journals.
		23	Program improvement products available through public libraries.
			EXCHANGE LEVEL
		2	Program improvement products available on a cost recovery basis.
X	X	6	Demonstrations of program improvement products at conferences/ workshops.
X	X	7	Panel discussions of product users at conferences/workshops.
X		13	Matching of program improvement products to local needs.
X		19	Communication between producers and users.
		21	Examination copies of program improvement products.
			CHOICE LEVEL
X	X	4	On-site demonstrations of program improvement products.
X	X	8	Field testing of products.
	X	10	Catalogs or brochures which compare alternatives of several products.
		14	Centers to demonstrate new products and programs.
		15	Implementation of specific products based upon local needs and conditions.
X	X	22	Choice of several products that would meet the same need.
			IMPLEMENTATION LEVEL
		5	Communication networks composed of program improvement product users.
X	X	9	Incentives for staff participating in program improvement activities.
X	X	16	Continued technical assistance.
X	X	17	Program improvement training programs tailored to match local needs and conditions.
X	X	20	On-site technical assistance.
X	X	24	Implementation techniques based upon local situations.

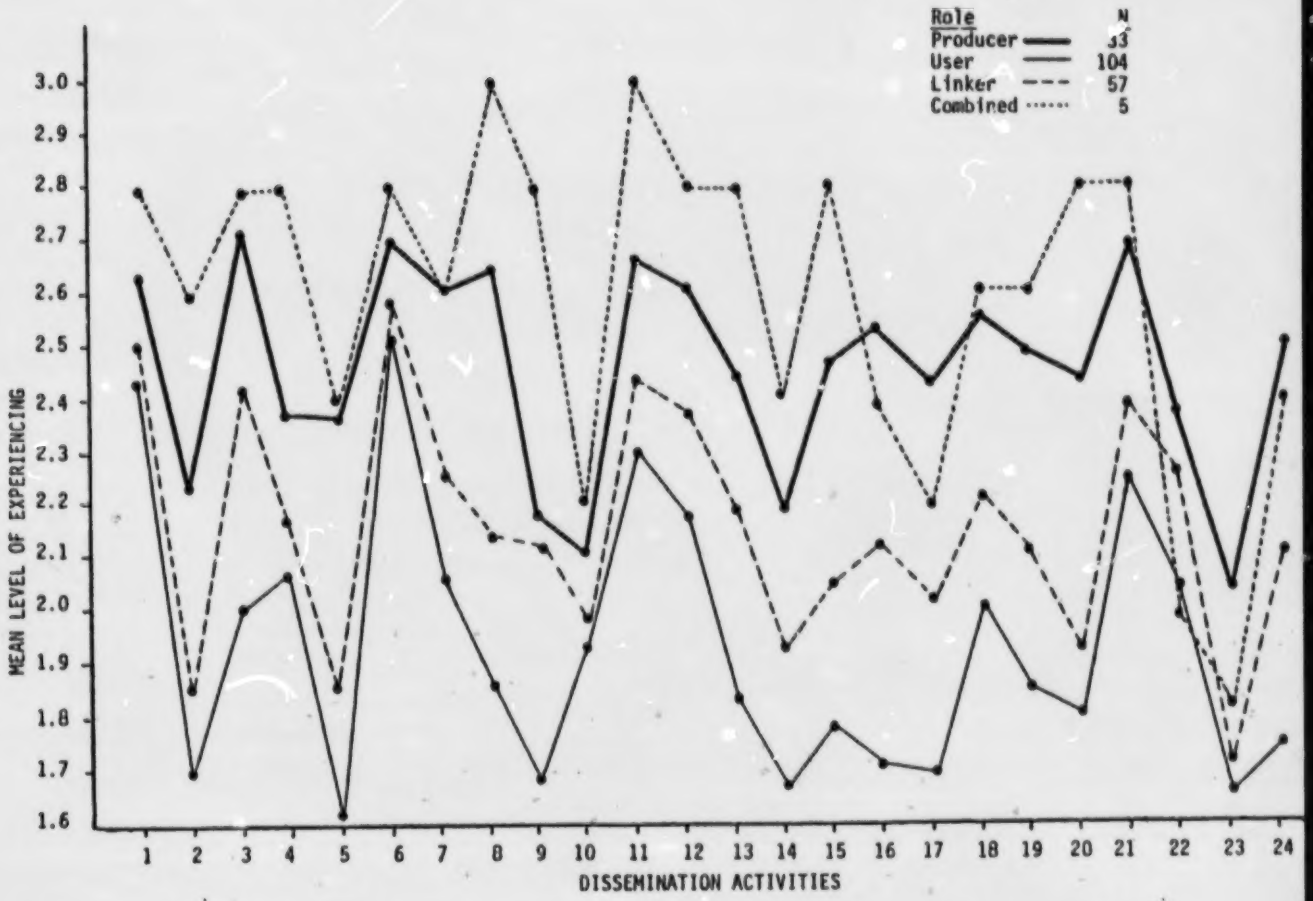

Figure 1. Mean Level of Experiencing by Activity by Role

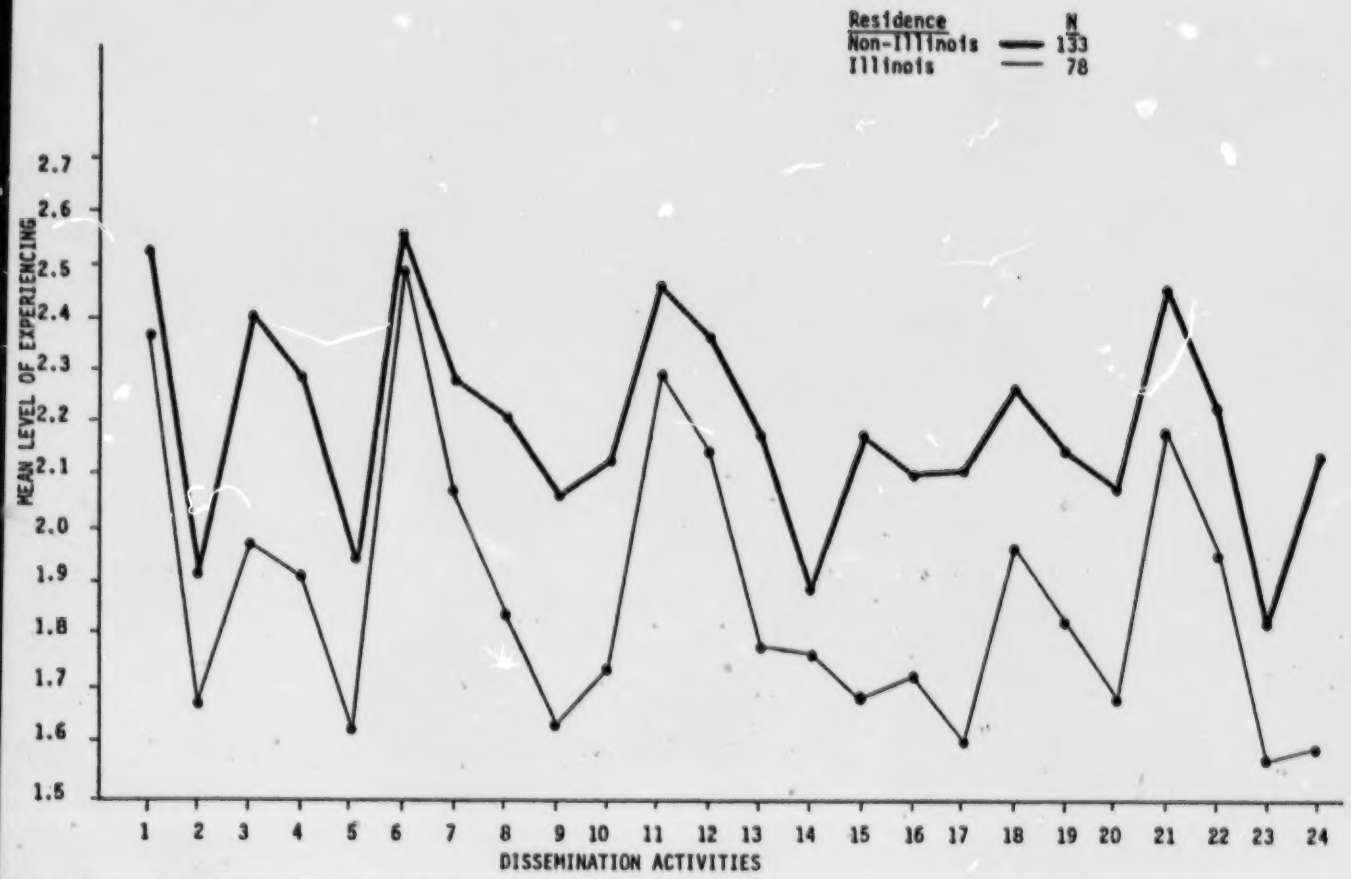

Figure 2. Mean Level of Experiencing by Activity by Residence